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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,389	04/13/2001	Jerrold E. Franklin	3737.02-1	3452
37362	7590	08/24/2005	EXAMINER	
NEIL A. STEINBERG			CANTELMO, GREGG	
2665 MARINE WAY, SUITE 1150			ART UNIT	
MOUNTAIN VIEW, CA 94043			PAPER NUMBER	

1745

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,389

Applicant(s)

FRANKLIN ET AL.

Examiner

Gregg Cantelmo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 2-18,20 and 22-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-18,20 and 22-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the amendment received June 9, 2005:
 - a. Claims 2-18, 20 and 22-37 are pending;
 - b. The specification objection is withdrawn in light of the amendment;
 - c. The double patenting rejection stands since it is not the only issue remaining in this rejection;
 - d. The previous drawing objections and new matter rejections are reintroduced. While the after final amendment received July 6, 2004 attempted to address and overcome these issues. The subsequent RCE did not request entry of this amendment and the claims never positively removed these limitations. In oversight, the Examiner failed to recognize this in the previous office action and prematurely withdrew these objections and rejections. Since the issues were never overcome nor convincingly rebutted by Applicant, these issues are still outstanding and restated herein as recited in the previous final office action. This action is NON-FINAL.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the separator being bent over or crimped *over the edge of said flexible membrane assembly so as to overlap a substantial portion of said flexible membrane assembly to prevent the release*

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of reactants from the fuel cell must be shown or the feature(s) canceled from the claim(s). No new matter can be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

a. Claims 2-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims as amended now recite that the edge portion of the separator plate is rolled, bent over or crimped *over the edge of said flexible membrane assembly so as to overlap a substantial portion of said flexible membrane assembly to prevent the release of reactants from the fuel cell*. There is no clear support for this arrangement as recited in the amendment and therefore raises new matter.

The only statement in the original disclosure as to the relationship between the separator and MEA is that the separator is bent, rolled, or crimped "against" the MEA (page 11, ll. 8-11). The specification does not define the

degree or extent of how exactly the separator is bent, rolled or crimped "against" the MEA and absent such cannot be held to sufficiently teach the particular arrangement as defined in claims 2-37 (in particular, the specification lacks sufficient description to support the amendment to claims 2 and 23 as to the separator being bent over or crimped *over the edge of said flexible membrane assembly so as to overlap a substantial portion of said flexible membrane assembly to prevent the release of reactants from the fuel cell*). Further the drawings fail to show this arrangement and lack support for this description since the figures showing the bent separator fail to include the MEA and thus lack sufficient disclosure to show the relationship defined in claims 2-37.

Thus the claims as amended raise new matter issues.

b. Claims 2-37 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for bending, rolling or crimping the separator against the MEA, does not reasonably provide enablement for the separator being bent over or crimped *over the edge of said flexible membrane assembly so as to overlap a substantial portion of said flexible membrane assembly to prevent the release of reactants from the fuel cell*. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. See the previous item for further details.

Double Patenting

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 2-18, 20 and 22-37 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-22 of copending Application No. 10/369,257. Although the conflicting claims are not identical, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Copending Application No. 10/369,257 claims a fuel cell having a single flexible or ridged bipolar separator, flexible mean and flexible seal, adhesive or gasket and manifold as defined in copending claim 2 applied to instant claim 2.

Copending Application No. 10/369,257 claims providing additional modules to form a fuel cell stack or unit (copending claim 3 as applied to instant claim 3).

Copending claim 4 and instant claim 4 are identical in scope. Copending claim 5 and instant claim 5 are identical in scope. Copending claim 6 and instant claim 6 are identical in scope. Copending claim 7 and instant claim 7 are identical in scope.

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Copending claim 8 and instant claim 8 are identical in scope. Copending claim 9 and instant claim 9 are identical in scope. Copending claim 10 and instant claim 10 are identical in scope. Copending claim 11 and instant claim 11 are identical in scope. Copending claim 12 and instant claim 12 are identical in scope. Copending claim 13 and instant claim 13 are identical in scope. Copending claim 14 and instant claim 14 are identical in scope. Copending claim 15 and instant claim 15 are identical in scope. Copending claim 16 and instant claim 16 are identical in scope. Copending claim 17 and instant claim 17 are identical in scope. Copending claim 18 and instant claim 18 are identical in scope. Copending claim 20 and instant claim 20 are identical in scope. Copending claim 22 and instant claim 22 are identical in scope.

Copending Application No. 10/369,257 claims a fuel cell having a single flexible or ridged bipolar separator, flexible mean and flexible seal, adhesive or gasket and manifold as defined in copending claim 2 applied to instant claim 23.

Copending Application No. 10/369,257 claims providing additional modules to form a fuel cell stack or unit (copending claim 3 as applied to instant claim 24). Copending claim 5 and instant claim 25 are identical in scope. Copending claim 6 and instant claim 26 are identical in scope. Copending claim 7 and instant claim 27 are identical in scope. Copending claim 8 and instant claim 28 and 29 are identical in scope. Copending claim 10 and instant claim 30 are identical in scope. Copending claim 11 and instant claim 31 are identical in scope. Copending claim 13 and instant claim 32 are identical in scope. Copending claim 14 and instant claim 33 are identical in scope. Copending claim 15 and instant claim 34 are identical in scope. Copending claim 16

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and instant claim 35 are identical in scope. Copending claim 17 and instant claim 36 are identical in scope. The bent or crimped edges are inherently one of continuous or discontinuous (as applied to claim 37).

Conclusion

5. As was the case previously, patentability determination is deferred pending clarification as to the exact manner in which the separator is configured relative to the MEA. In particular whether the separator overlaps an MEA, as recited in the claims but not shown in the drawings or abuts the edge of the MEA, is a particular point which requires further clarification

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (571) 272-1283. The examiner can normally be reached on Monday to Thursday from 9 a.m. to 6 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. FAXES received after 4 p.m. will not be processed until the following business day. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregg Cantelmo
Primary Examiner
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gc

A handwritten signature in black ink, appearing to read "Gregg Cantelmo", written over the printed name.

August 20, 2005

Figur 8

